

REMARKS/ARGUMENTS

Support for the claim amendments is found throughout the specification and at the originally filed claims. Additionally, support for the amendments to Claims 1 and 8 is found at, for example, pages 13-14, Examples 1 and 2, which implicitly describe the direct embedding of one or more microparticle layers (P) into a polymer sheet extrudate (PS), on one or more surfaces of the polymer sheet extrudate (PS), to form a functionalized sheet extrudate (X), with the total number of layers (n) of the functionalized sheet extrudate (X) being equal to the sum of the layers P + 1.

Responsive to the Official Communication of September 6, 2007, claim status identifiers have been updated.

Upon entry of the amendment, Claims 1-20 will be active.

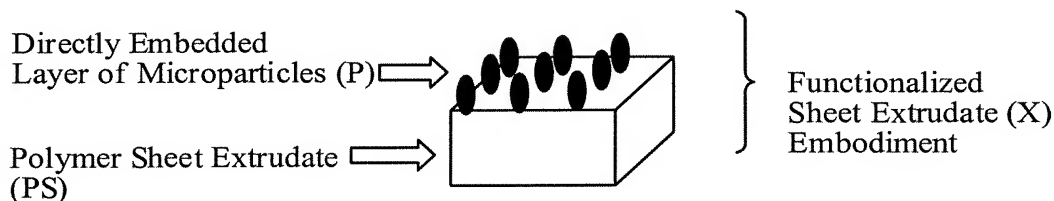
No new matter is believed to have been added.

Applicants thank Examiner Watkins for the helpful and courteous interview of July 25, 2007, wherein Applicants' US representative discussed an embodiment of the invention wherein the microparticles are embedded in the surface of the polymer sheet extrudate, and wherein it was agreed that the Office would reconsider Claim 8, based on the proposition that Keller does not appear to describe rolling microparticles into the surface of a polymer sheet extrudate. The Applicants, and the undersigned, express gratitude to Examiner Watkins for the comprehensive and thorough discussion of Keller and the proposed amended claims.

Applicants respectfully traverse the obviousness rejection of Claims 1-20 as being unpatentable over Keller, because Keller does not describe or suggest all the features of Claims 1 and 8, and in fact teaches away from one of the features of these claims.

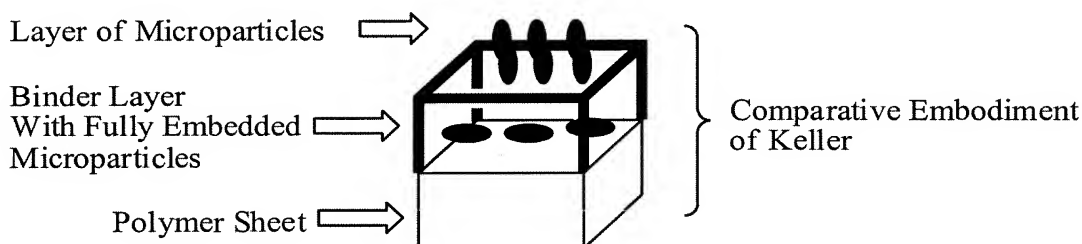
Present Claim 1 describes the microparticles protruding from a surface of the polymer sheet extrudate (PS) as a layer of microparticles (P) in the functionalized sheet extrudate (X). Claim 1 further describes that the functionalized sheet extrudate (X) has a total number of

layers equal to the sum of the layers $P + 1$. The following drawing of an embodiment of Claim 1 is illustrative:



In the functionalized sheet extrudate embodiment (X), there are two layers: the polymer sheet extrudate (PS) and the directly embedded layer of microparticles (P). Thus the total number of layers (n) = 2 = 1(P) layer + 1 (PS) layer.

In contrast, a comparative embodiment of Keller is shown below:



Because the composition of Keller are made by mixing microparticles into a coating composition containing a binder and a solvent (see, for example, paragraph 101 of Keller) and then applying the coating composition to a substrate (polymer sheet in the above-listed drawing) and subsequently evaporating the solvent (see, for example, paragraph 108) of Keller, the compositions of Keller always contain at least one additional layer not found in the compositions of, for example, present Claim 1, because Keller always produces an intermediate binder layer that contains fully embedded microparticles (i.e., microparticles fully submerged in the binder), and this layer of Keller's composition is not present in the composition embodiments of, for example, present Claim 1.

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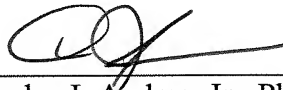
Reply to Office Action of July 2, 2007, and the Official Communication of September 6, 2007

Thus, Keller does not describe or suggest a feature of present Claim 1, that the composition has n total layers, wherein $n = \Sigma P + 1$, and in fact teaches away from this Claim 1 feature.

Withdrawal of the obviousness rejection is respectfully requested.

Respectfully submitted,

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